

WHAT IS CLAIMED IS:

- 1 1. A method for identifying recorded sound signals comprising the steps of:
 - 2 a) receiving a sound stream containing at least a portion of an unidentified recorded
 - 3 sound;
 - 4 b) processing the received sound stream to construct a set of values corresponding to
 - 5 characteristics of the unidentified recorded sound;
 - 6 c) searching a library having a plurality of sets of values corresponding to characteristics
 - 7 of a plurality of identified recorded sounds; and
 - 8 d) comparing the constructed set of values to one or more sets of values in the library.
- 1 2. The method according to claim 1, further including a step of selecting an identified
- 2 recorded sound to the unidentified recorded sound based on a result of the comparing step c).
- 1 3. The method according to claim 2, further including a step of returning information
- 2 relating to the selected identified recorded sound to the user.
- 1 4. The method according to claim 1, wherein the unidentified recorded sound is provided
- 2 to the user over a transmission medium.
- 1 5. The method according to claim 4, wherein the transmission medium includes acoustic
- 2 waves.

1 6. The method according to claim 4, wherein the transmission medium includes radio
2 waves.

1 7. The method according to claim 4, wherein the transmission medium includes digital
2 audio streams.

1 8. The method according to claim 4, wherein the transmission medium includes PCM
2 streams.

1 9. The method according to claim 4, wherein the transmission medium includes internet
2 streaming broadcasts.

1 10. The method according to claim 4, wherein the digital audio stream is compressed.

1 11. The method according to claim 10, wherein the compressed digital audio stream is a
2 Dolby Digital or MP3 audio stream.

1 12. The method according to claim 3, wherein the information is returned over a first
2 delivery channel, the first delivery channel including a user interface selected from the group
3 consisting of real-time reporting interfaces and offline reporting interfaces.

1 13. The method according to claim 12, wherein the real-time reporting interface is an
2 interactive voice response interface.

1 14. The method according to claim 12, wherein the reported information is provided to
2 the user as a voice report.

1 15. The method according to claim 12, wherein the real-time reporting interface is a
2 WAP browser interface.

1 16. The method according to claim 12, wherein the offline reporting interface is an
2 internet browser interface.

1 17. The method according to claim 1, wherein the sound stream is received over a second
2 delivery channel selected from the group consisting of POTS lines, wireless cellular, wireless
3 PCM, GSM, internet, radio, satellite, and a network.

1 18. The method according to claim 17, wherein the network includes a local area
2 network.

1 19. The method according to claim 17, wherein the network includes an Ethernet
2 network.

1 20. The method according to claim 17, wherein the network includes one or more private
2 networks.

21. The method according to claim 17, wherein the network includes a cable network.

22. The method according to claim 17, wherein the network operates according to a short-range wireless protocol.

23. The method according to claim 22, wherein short-range wireless protocol includes the Bluetooth wireless standard.

24. The method according to claim 1, wherein the sound stream is captured by a capture device operated by a user

25. The method according to claim 24, wherein the capture devices includes a telephone.

26. The method according to claim 24, wherein the capture devices includes a mobile telephone.

27. The method according to claim 24, wherein the capture devices includes a tape recorder.

28. The method according to claim 24, wherein the capture devices includes a digital voice recorder.

1 29. The method according to claim 24, wherein the capture devices includes an
2 answering machine.

1 30. The method according to claim 24, wherein the capture devices includes a radio
2 receiver.

1 31. The method according to claim 24, wherein the capture devices includes a walkie-
2 talkie.

1 32. The method according to claim 24, wherein the capture devices includes an internet
2 streaming socket.

1 33. The method according to claim 24, wherein the capture devices includes a voice-
2 over-IP transceivers.

1 34. The method according to claim 2, wherein the result is obtained by determining a
2 score associated with the constructed set of values and one or more sets of values in the library.

1 35. A method for providing a transaction to a user exposed to a media stream, the
2 method comprising the steps of:

- 3 a) receiving a signal including a captured sample of media stream from the user;
4 b) determining from the signal a characteristic of the captured sample; and

5 c) triggering a predetermined transaction with the user in response to the determined
6 characteristic.

1 36. The method according to claim 35, wherein the predetermined transaction includes
2 sales and purchase of merchandise.

1 37. The method according to claim 35, wherein the predetermined transaction includes
2 an offer for sale of merchandise.

1 38. The method according to claim 37, wherein the offer for sale of merchandise
2 includes an offer to sell recordings of music.

1 39. The method according to claim 38, wherein the recording is related to a characteristic
2 of the captured sample.

1 40. The method according to claim 35, wherein the predetermined transaction includes
2 furnishing and receiving information.

1 41. The method according to claim 35, wherein the predetermined transaction includes
2 delivery of advertising or promotional offers.

1 42. The method according to claim 41, wherein the promotional offers include trial
2 offers.

1 48. The method according to claim 47, wherein the music is received by the user via a
2 radio broadcast and the captured sample includes a sample of the radio broadcast.

1 49. The method according to claim 48, further including returning the identity record to
2 the user.

1 50. The method according to claim 48, further including offering to sell to the user a
2 recording including at least a song which corresponds to the located identity record.

1 51. The method according to claim 48, further including offering to provide to the user
2 information relating to the located identity record.

1 52. The method according to claim 48, further including a step of playing a recording of
2 a song corresponding to the located identity record to the user.

1 53. The method according to claim 48, further including a step of offering to sell
2 merchandise.

1 54. The method according to claim 53, wherein the merchandise relates to the located
2 identity record.

1 55. The method according to claim 48, further including offering to sell live performance
2 tickets.

1 56. The method according to claim 55, wherein the live performance tickets relate to the
2 located identity record.

1 57. The method according to claim 48, further including offering to sell record albums to
2 be released at a future time.

1 58. The method according to claim 48, further including offering to provide information
2 pertaining to a location of retail music establishments.

1 59. The method according to claim 58, wherein the information further includes
2 information pertaining to a location of retail music establishments that are in close proximity to
3 the user.

1 60. The method according to claim 48, further including downloading media to a user
2 device.

1 61. The method according to claim 60, wherein the downloaded media includes a pre-
2 recorded song corresponding to the located identity record.

1 62. The method according to claim 60, wherein the user device is selected from the group
2 consisting of PCs, PDAs, internet access devices, wireless internet devices, mobile telephones,
3 wireless information devices, and pagers.

1 63. The method according to claim 48, further including receiving commands from the
2 user in response to the returned identity record.

1 64. The method according to claim 63, further including performing an additional
2 predetermined step in response to the command.

1 65. The method according to claim 64, wherein the predetermined step includes
2 delivering a message to a third party.

1 66. The method according to claim 65, wherein the message includes a recommendation
2 of music corresponding to the located identity record.

1 67. The method according to claim 64, wherein the predetermined step includes a
2 collection of data indicative of music popularity.

1 68. The method according to claim 67, wherein the collected data includes data received
2 from the user.

1 69. The method according to claim 64, wherein the predetermined step includes playing
2 additional songs not associated with the located identity record to the user.

1 70. The method according to claim 64, wherein the predetermined step includes locating
2 one or more music performance artists matching a predetermined criterion.

1 71. The method according to claim 70, wherein the criterion includes similarity of the one
2 or more music performance artists to an artist associated with the located identity record.

1 72. The method according to claim 64, wherein the predetermined step includes
2 providing a critical review of a music performance artist associated with the located identity
3 record.

1 73. The method according to claim 64, wherein the predetermined step includes
2 providing critical reviews of a record album containing a song corresponding to the located
3 identity record.

1 74. The method according to claim 64, wherein the predetermined step includes
2 providing information pertaining to popularity of a song or music performance artist associated
3 with the located identity record.

1 75. The method according to claim 64, wherein the predetermined step includes
2 delivering information to the user.

1 76. The method according to claim 75, wherein the information pertains to the located
2 identity record.

1 77. The method according to claim 75, wherein the information is delivered in an SMS
2 format.

1 78. The method according to claim 75, wherein the information pertains to new album
2 releases.

1 79. The method according to claim 76, wherein the information pertains to scheduling of
2 concerts.

1 80. The method according to claim 79, wherein the concert is related to the located
2 identity record.

1 81. The method according to claim 48, further including storing the captured sample.

1 82. The method according to claim 64, wherein the predetermined step includes
2 delivering an excerpt of a recording of a song corresponding to the located identity record.

1 83. The method according to claim 72, wherein the excerpt is delivered to the user.

1 84. The method according to claim 72, wherein the excerpt is delivered to a third party.

1 85. A method for identifying music to a user exposed to a broadcast that includes
2 unidentified music, the method comprising:

- 3 a) receiving a signal including a captured sample of the broadcast from the user;
4 b) determining from the signal a characteristic of the captured sample;
5 c) comparing the characteristic of the captured sample to a characteristic associated with
6 an identity record contained in a database;
7 d) attempting to locate an identity record corresponding to the captured sample
8 according to a result of the comparison; and
9 e) storing the captured sample if the location attempt is unsuccessful.

1 86. The method according to claim 85, further including delivering the captured sample
2 to remote locations.

1 87. The method according to claim 85, wherein the delivered captured samples are used
2 in games or contests involving attempts to identify the unidentified music.

1 88. A method for identifying music to a user exposed to a broadcast, which includes
2 unidentified music, the method comprising the steps of:

- 3 a) receiving a signal including a captured sample of the broadcast from the user;
4 b) determining from the signal a characteristic of the captured sample;
5 c) comparing the characteristic of the captured sample to a characteristic associated with
6 an identity record contained in a database;

- 7 d) attempting to locate an identity record corresponding to the captured sample
8 according to a result of the comparison; and
9 e) providing an interactive interface for the user to store manipulate data associated with
10 a successfully located identity record.

1 89. The method according to claim 88, wherein the interface is selected from the group
2 consisting of real-time interfaces, offline interfaces, and combinations thereof.

1 90. The method according to claim 89, wherein the offline interface is selected from the
2 group consisting of internet browsers, email, SMS messaging, and combinations thereof.

1 91. The method according to claim 88, wherein the interface is arranged to allow the user
2 to store, retrieve and forward the data.

1 92. The method according to claim 88, wherein the interface is arranged to allow the user
2 to communicate with third parties.

1 93. The method according to claim 88, wherein the interface is arranged to allow the user
2 to participate in games or contests.

1 94. The method according to claim 93, wherein the games or contests include identifying
2 unidentified songs.

1 95. The method according to claim 88, wherein the interface is arranged to allow the user
2 to forward data to a website.

1 96. The method according to claim 95, wherein the website is configured to provide
2 personalized radio station services to the user.

1 97. An apparatus for identifying music to a user exposed to a broadcast that includes
2 music unidentified to the user comprising:

3 a) a receiver arranged to receive a signal including a captured sample of the broadcast
4 from the user;

5 b) a signal analyzer for determining from the signal a characteristic of the captured
6 sample;

7 c) a database containing a library of identity records; and

8 d) a comparator that compares the determined characteristic to characteristics associated
9 with identity records contained in the database for locating an identity record that
10 matches the captured sample.

1 98. The apparatus according to claim 97, further including a transmitter for transmitting
2 information related to the located identity record to the user.

1 99. The apparatus according to claim 97, further including an interactive voice response
2 unit.

1 100. The apparatus according to claim 99, wherein the interactive voice response unit is
2 operated from a script which includes an offer to sell to the user a music recording including at
3 least a song which corresponds to the located identity record.

1 101. The apparatus according to claim 99, wherein the interactive voice response unit is
2 operated from a script which includes an offer to provide to the user information relating to the
3 located identity record.

1 102. The apparatus according to claim 97, further including a music player for playing a
2 recording of a song corresponding to the located identity record to the user.

1 103. The apparatus according to claim 97, further including a music downloader for
2 downloading a recording of a song corresponding to the located identity record to the user.

1 104. The apparatus according to claim 103, wherein the downloader downloads the
2 recording to a user device.

1 105. The apparatus according to claim 104, wherein the user device is selected from the
2 group consisting of PCs, PDAs, internet access devices, wireless internet devices, mobile
3 telephones, wireless information devices, and pagers.

1 106. A method for identifying recorded sound signals comprising:
2 a) receiving a signal including a captured sample of an audio signal;

Figure 1 *Mean (SD) age of onset of symptoms (years) for each disorder*

[illegible]